



ART. II.—Notes and Descriptions of New Zealand Lepidoptera.

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Communicated by G. V. Hudson, F.E.S.

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I AM again indebted for the material of these notes to the energetic assistance of my valued correspondents, Mr. G. V. Hudson, of Wellington, and Mr. A. Philpott, of Invercargill.

CARADRINIDÆ.

Leucania phaula, MEYR.

L. neura, Philp. (Trans. N.Z. Inst., 1904, 330), is a synonym of this species. Mr. Philpott kindly sent me two examples of his species, himself suggesting that it might be identical with my *phaula*, and this is undoubtedly the case.

PLUSIADÆ.

Plusia transfixa, Walk.

Mr. Hudson sent me several examples of this species from the Thames district. It is common and widely distributed in eastern Australia, where it is undoubtedly native; it has not been hitherto recorded from New Zealand, and may perhaps have only recently succeeded in introducing itself. The species of this genus are strong and bold fliers, and can cross wide seas.

HYDRIOMENIDÆ.

Eucymatoge anguligera, Butl.

♂ ♀. 32–37 mm. Head and thorax whitish-ochreous, partially sprinkled with brown-reddish; thorax with an irregular transverse anterior reddish-fuscous or dark-fuscous line. Abdomen whitish-ochreous sprinkled with brown-reddish, with a bar of blackish suffusion on apex of second segment, and sometimes a double dorsal series of blackish dots. Forewings triangular, costa posteriorly moderately arched, apex obtuse, termen bowed, oblique, strongly waved; pale brownish-ochreous, with numerous waved ferruginous-brown stricæ, tending to be somewhat marked with black on veins and costa; median band somewhat paler through obsolescence of stricæ, limited by groups of stricæ more distinctly marked with black, anterior curved, posterior rounded-prominent beneath costa and in middle, latter prominence suffused with blackish; an oblique subapical patch of darker brown suffusion, its upper edge defined and running from above median prominence to apex; cilia pale ochreous mixed with brown-reddish, basal half sprinkled with dark fuscous. Hindwings with termen rounded, irregularly waved-dentate; colour and stricæ as in forewings, but prominences of median band nearly obsolete; a blackish discal dot; cilia as in forewings.

Invercargill, common on flowers of *Senecio* in March (Philpott); two specimens. Much like *gobiata*, from which it may be certainly distinguished by the much more strongly waved termen of both wings; *gobiata* is also rather smaller, whiter-irrorated, with straighter striæ, lower half of anterior margin of median band and oblique streak from apex forming distinct black lines. I formerly quoted Butler's name erroneously as a synonym of *gobiata*.

Xanthorhœ adonis, Huds.

Having received two fine specimens from Mr. Philpott, I am satisfied it is a good species, and readily distinguished from *beata* by the colour of the hindwings.

Notoreas fulva, Huds. (*Lythria fulva*, Huds., Trans. N.Z. Inst., 1904, 357.)

According to two ♀ specimens communicated by Mr. Hudson, this species is a true *Notoreas*.

SELIDOSEMIDÆ.

Selidosema leucelæa, n. sp.

♂ 30–32 mm., ♀ 27–30 mm. Head white or ochreous-whitish, somewhat mixed with grey and dark fuscous, anterior half of crown in ♂ suffused with ochreous. Antennal pectinations of ♂ : *a*, 9; *b*, 6. Thorax whitish, anteriorly irregularly marked with blackish, and in ♂ partially suffused with brownish-ochreous. Abdomen whitish-ochreous tinged with grey. Forewings triangular, costa somewhat bent beyond middle, termen rounded, somewhat oblique; white, more or less strewn with black or in ♂ brownish specks and strigulæ; in ♂ the whole wing is more or less suffused with grey or olive-brown, except a straight white fascia (usually interrupted in middle) before subterminal line, and more or less of dorsal area towards middle, and there is usually a broad streak of brown suffusion beneath costa and another along termen, in ♀ there is no brown colouring, but sometimes some grey suffusion; basal area more or less marked with blackish; first and second lines more or less indicated by white marks, enclosed between thick blackish more or less interrupted waved lines, first obtusely angulated above middle, second nearly straight, sinuate near dorsum; median cloudy, blackish, sinuate, interrupted; discal spot transverse-linear, black, beyond median line; subterminal line slender, waved, white, partially edged anteriorly with blackish suffusion, and followed by grey or brown suffusion: cilia grey, barred in ♂ with brownish, in ♀ with white. Hindwings pale whitish-ochreous, sometimes tinged with grey, sometimes darker posteriorly; a grey discal dot; two or three waved grey lines sometimes more or less developed posteriorly; a terminal series of blackish-grey crescentic marks: cilia whitish-ochreous, obscurely barred with greyish.

Christchurch, Otira Gorge, Dunedin, Invercargill; from January to March, and in July; seven specimens. I have possessed examples of this species for a long time, but did not feel sure of their status, the species being a very variable one, and allied to other variable species; having now, however, received four very fine specimens from Mr. Philpott, I am satisfied that it is a good species. Mr. Philpott writes that it is usually confused in collections with *productata*; it is, however, nearer *melinata*, from which it differs by the much longer antennal pectinations, less rounded termen of forewings, distinct and unusually straight white posterior fascia,

hindwings of ♂ not tinged with fuscous towards base, and other details. *S. productata* is also very variable, but easily distinguished by different form of median band, of which the posterior margin is obtusely angulated rather above middle; in fact, all the allied species could be distinguished by the form of the posterior margin of median band, which is different in each.

Selidosema lupinata, Feld.

S. humillima, Huds., is a synonym of this species, according to specimens sent me by Mr. Philpott, by request of Mr. Hudson.

PYRAUSTIDÆ.

Scoparia gyrotoma, n. sp.

♂. 20 mm. Head pale ochreous, sides mixed with whitish. Palpi $2\frac{1}{2}$, grey sprinkled with whitish, white towards base beneath. Antennæ blackish, ciliations $\frac{1}{2}$. Thorax pale brassy-ochreous sprinkled with grey, margins suffused with whitish. (Abdomen broken.) Forewings elongate, narrow, gradually dilated, costa sinuate in middle, apex obtuse, termen slightly rounded, somewhat oblique; light brassy-yellowish-fuscous, suffusedly irrorated with white and sprinkled with dark fuscous; an oblique fascia of blackish suffusion near base; lines thick, suffused, whitish, first rather indented on fold, followed by a fascia of blackish irroration, second slightly angulated above middle, preceded by a fascia of blackish irroration; orbicular and claviform coalescing to form an 8-shaped blotch of blackish suffusion with two whitish centres, confluent with blackish fascia of first line; a smaller 8-shaped discal spot outlined with blackish and filled with whitish, its lower extremity confluent with margin of second line; terminal area irrorated with blackish, subterminal line represented by broad cloudy whitish suffusion not reaching tornus: cilia whitish, with a grey median shade, basal half barred with darker grey. Hindwings $1\frac{1}{2}$, grey-whitish, costa and termen narrowly suffused with light grey; cilia white.

Lake Tekapo; one specimen (Hudson). Allied to *S. asaleuta*, but very distinct.

Scoparia cyptastis, n. sp.

♂ ♀. 17–20 mm. Head grey, more or less mixed or suffused with white. Palpi 3, dark-grey, sprinkled with white above, wholly white towards base beneath. Antennæ dark fuscous, ciliations in ♂ $\frac{1}{2}$. Thorax dark purplish-grey sprinkled with whitish. Abdomen whitish-ochreous, more or less sprinkled with grey. Forewings elongate, narrow at base, oblique; fuscous, variably mixed or suffused with whitish, veins tending to be more or less streaked with dark fuscous or blackish; a black streak on fold from base to first line, interrupted in middle by a white spot; lines thick, white, first curved, little oblique, more or less edged with dark fuscous posteriorly, second slightly curved, indented beneath costa and sinuate above dorsum; orbicular and claviform small, rather elongate, black, orbicular sometimes touching edge of first line; discal X-shaped, black; subterminal line cloudy, whitish, entire, irregular, not touching second line; a terminal series of black marks on veins: cilia whitish, with rather dark fuscous basal and paler median shades. Hindwings $1\frac{1}{2}$, without long hairs in cell; pale whitish-fuscous, with a faint yellowish tinge, termen suffused with fuscous, more strongly in ♀: cilia whitish, with two light-fuscous shades, basal darker in ♀.

Invercargill, common in November (Philpott); three specimens. Belongs to the *cleodoralis* group; not very like any New Zealand species, but probably related to the Tasmanian *plagiotis* and its allies.

Scoparia luminatrix, n. sp.

♂ ♀. 19–22 mm. Head rather dark fuscous, sprinkled with whitish and mixed on crown with yellow-ochreous. Palpi 3, dark fuscous sprinkled with whitish, towards base white beneath. Antennæ dark fuscous, ciliations in ♂ $\frac{1}{3}$. Thorax fuscous mixed with dark fuscous and whitish. Abdomen fuscous, segmental margins ochreous-whitish. Forewings very elongate-triangular, costa slightly arched, somewhat bent posteriorly, apex obtuse, termen rather obliquely rounded; deep ochreous-brown, suffusedly streaked with blackish on veins, especially tending to form a median longitudinal black streak interrupted by lines; first and second lines white, well marked, first curved, waved, little oblique, edged posteriorly with black suffusion, on upper half sometimes broadly, second slightly curved, indented towards costa, and sinuate above dorsum; median band much mixed with white, especially towards second line below middle, where it sometimes forms a conspicuous patch of white suffusion; orbicular and claviform small, round, partially outlined with black, and filled with whitish, sometimes absorbed in black suffusion of first line; discal indistinct, 8-shaped, white, partially edged with black; subterminal line cloudy, whitish, remote from second throughout, indistinctly interrupted above middle: cilia whitish, with two grey shades interrupted by white bars. Hindwings $1\frac{1}{4}$, with long hairs in cell; whitish-fuscous tinged with brassy-yellowish; discal spot, post-median line, and a terminal fascia indistinctly fuscous: cilia fuscous-whitish, with two fuscous shades.

Invercargill, in October and November; five specimens (Philpott). Rather variable in the development of the black and white scales. A distinct species, somewhat intermediate between *legnota* and *epicremna*.

CRAMBIDÆ.

Crambus saristes, n. sp.

♂. 17–18 mm. Head and thorax ferruginous-brown, face prominent, flattened-conical; edge of collar and a spot on shoulders whitish. Palpi $3\frac{1}{2}$, brown mixed with dark fuscous, whitish towards base beneath. Antennæ dark fuscous, pubescent-ciliated ($\frac{1}{3}$). Abdomen dark grey. Forewings elongate, gradually dilated, costa slightly arched, apex obtuse, termen little rounded, rather oblique; bright ferruginous-brown; a slender median longitudinal rather irregular ochreous-whitish streak from base to termen, terminal fifth attenuated and tending to be obsolescent: cilia slaty-grey. Hindwings dark-grey; cilia pale-grey, basal third slaty-grey. Under-surface dark-grey, hindwings sometimes with very slender indistinct median streak of whitish suffusion; costal edge of hindwings whitish-yellowish: all cilia whitish-grey.

Invercargill, in January (Philpott); two specimens. Very close to *heteranthes* from Mount Cook, but that species is darker, median streak of forewings whiter, broader, more regular, forewings on under-surface with dorsum suffused with white, hindwings on under-surface with costa suffused with white towards base, and well-marked white median streak, cilia white towards base. Possibly more extensive material may show this to be a local form of *heteranthes*, but at present it seems better to treat them as distinct.

Crambus aulistes, n. sp.

♂. 16 mm. Head, palpi, and thorax ferruginous-brown, face rounded-prominent; palpi 4, whitish towards base beneath. Antennæ dark fuscous, pubescent-ciliated ($\frac{3}{4}$). Abdomen rather dark fuscous. Forewings elongate, broader than in *saristes*, costa gently arched, apex obtuse, termen straight, rather oblique, rounded beneath; ferruginous-brown; a moderate regular white median longitudinal streak from base to termen, somewhat edged with fuscous suffusion towards middle: cilia pale grey, with darker basal shade, on costa whitish except near apex, with a white bar on terminal extremity of median streak. Hindwings dark fuscous; cilia whitish, basal third fuscous. Under-surface dark grey, forewings much suffused with yellowish towards costa and termen, on dorsum broadly whitish-yellowish, hindwings with costa rather broadly pale ochreous-yellowish, with veins suffusedly streaked with pale yellowish, especially on a median streak, all cilia whitish.

Invercargill (Hudson); one specimen. Distinguished from the preceding by the broader forewings, rather longer palpi and antennal ciliations, white costal cilia, extensive yellowish suffusion of under-surface, and other details.

Crambus melitastes, n. sp.

♂ ♀. 17–20 mm. Head, palpi, and thorax ochreous-brown, in ♀ with a broad dorsal white stripe extending through crown and thorax, face somewhat rounded-prominent; palpi 4, whitish beneath and more or less above, especially in ♀. Antennæ dark fuscous, in ♂ simply ciliated ($\frac{1}{3}$). Abdomen rather dark fuscous, more or less whitish on segmental margins posteriorly. Forewings elongate, gradually dilated, costa hardly arched, apex obtuse, termen straight, rather oblique, rounded beneath; ochreous-brown; a moderate white median longitudinal streak from base to termen, slightly broadest in middle, in ♂ more or less edged beneath with dark-fuscous suffusion, in ♀ broadly edged with dark-fuscous suffusion on both margins except towards base above; in ♀ a narrow irregular white suffused subcostal streak, and broad dorsal or subdorsal white streak narrowed towards base; in ♂ a slender white streak along upper part of termen above median streak, in ♀ a broader undefined patch of white suffusion: cilia in ♂ pale grey, with a white basal streak on upper half of termen, in ♀ almost wholly white. Hindwings rather dark fuscous, with a broad costal streak of whitish-ochreous suffusion from base to $\frac{3}{4}$; cilia whitish-ochreous, in ♂ more or less greyish-tinged, and with a grey basal line. Under-surface wholly light ochreous-yellowish, forewings somewhat infuscated; cilia ochreous-whitish.

Invercargill, in December; three specimens taken by myself, and three others received from Mr. Philpott. I have hitherto confused this species with *athonellus*, and recorded it under that name, but now see it to be distinct. *Athonellus*, which is known from Mount Hutt only, has the costal edge of forewings ochreous-whitish, no white streak on upper part of termen or in cilia, hindwings without the pale-yellowish costal patch, but with cilia clear pale-yellowish except basal line, under-surface of forewings suffused with grey except towards costa and on a median streak, of hindwings partly greyish between veins. In five of the seven species of this group—viz., *athonellus*, *aulistes*, *saristes*, *heteranthes*, and *antimorus*—the antennæ of ♂ are pubescent-ciliated—that is, clothed with short pubescence over their whole surface, but with a row of somewhat longer cilia on one side; in the other two—*melitastes* and *heliotes*—they are glabrous (devoid of pubescence), but simply ciliated on one side.

PTEROPHORIDÆ.

Platyptilia æolodes, Meyr.

Described (Trans. Ent. Soc. Lond., 1902, 278) from the Chatham Islands; but Mr. Philpott has now sent me two specimens from Invercargill—a very interesting record. It is allied to *falcatalis*, but smaller and darker, and distinguished by the prominent angulation of termen of second segment of forewings (in *falcatalis* the margin is somewhat bent but not angulated), and the principal dorsal scale-tuft of hindwings being hardly beyond the middle, whereas in *falcatalis* it is much broader and is considerably beyond the middle.

Platyptilia isoterma, n. sp.

♂. 18 mm. Head white mixed with dark reddish-fuscous, frontal tuft moderately long. Palpi brownish irrorated with dark fuscous. Antennæ grey, above with a blackish line. Thorax whitish irrorated with dark reddish-fuscous, metathorax suffused with black and edged with white. Abdomen dark reddish-fuscous sprinkled with whitish, and mixed with blackish on sides towards middle. Legs reddish-fuscous sprinkled with white, tibiæ and tarsi banded with white and dark fuscous. Forewings cleft from beyond $\frac{3}{4}$, segments broad, termen of first sinuate, of second bowed in middle; reddish-fuscous closely irrorated with whitish and sprinkled with dark fuscous, anterior $\frac{3}{4}$ transversely strigulated with white, especially towards dorsum; costal edge suffused with dark fuscous and strigulated with white; a triangular black blotch on costa at $\frac{2}{3}$, its apex produced and extending to before lower angle of cleft, edged posteriorly by a fascia of brownish-ochreous suffusion crossing base of both segments, followed by a broader fascia of dark-fuscous suffusion, edged posteriorly by an even whitish line parallel to termen: cilia grey, on costa dark fuscous with a white spot before apex, on termen whitish towards base with a sharply marked even black basal line throughout, on dorsum mixed with black scales, forming a tolerably even line posteriorly, at $\frac{2}{3}$ with a flat black scale-tooth preceded and followed by whitish patches. Hindwings cleft firstly from middle, secondly from $\frac{1}{4}$, segments moderately broad, termen of second subsinuate; grey; cilia light grey, on dorsum mixed with black scales throughout, with a moderate elongate-triangular black scale-projection beginning at $\frac{3}{5}$.

Wellington; one specimen (Hudson). Allied to *falcatalis* and *æolodes*, but differs from both in the strong black entire line at base of terminal cilia of forewings. The species of this genus require careful discrimination, and probably more remain to be found in the mountains; their larvæ are usually attached to *Compositæ* (feeding variously on the flowers or leaves, or in the stems), and should be looked for.

EPIBLEMIDÆ.

Strepsicrates chaophila, n. sp.

♀. 14 mm. Head, palpi, and thorax ochreous. Abdomen grey. Forewings elongate, gradually dilated, costa moderately arched, apex obtuse, termen somewhat sinuate, rather oblique; ferruginous-ochreous, irregularly mixed with white; costa and dorsum shortly strigulated with blackish; a large trapezoidal blotch of partial blackish suffusion extending over costal half of wing from base to near middle, posteriorly formed by upper part of central fascia; a rounded-triangular blackish spot on dorsum before tornus; a curved leaden-metallic stria from $\frac{4}{5}$ of costa to tornus, forming posterior

margin of ocellus, anterior margin silvery-whitish, ocellus limited above by a triangular blackish spot, and containing two or three undefined black dashes: cilia ferruginous-ochreous, with a blackish basal line (imperfect). Hindwings with vein 4 absent; rather dark grey; cilia grey, with darker basal shade.

Wellington; one specimen (Hudson).

TORTRICIDÆ.

Cacoecia sphenias, n. sp.

♂. 15 mm. Head and palpi grey; palpi moderate, terminal joint very short. Antennal ciliations 1. Thorax reddish-ochreous, somewhat mixed with grey. Abdomen rather dark grey. Forewings elongate-triangular, costa gently arched, fold occupying basal $\frac{2}{5}$, apex obtuse, termen slightly rounded, rather oblique; reddish-fuscous, suffusedly strigulated with light yellow-ochreous; costal fold strigulated with blackish; several dark ferruginous-brown dots on dorsum; a wedge-shaped ochreous patch mixed with dark reddish-fuscous and towards costa with orange, resting on costa from $\frac{3}{5}$ to $\frac{4}{5}$, its apex touching termen above tornus, preceded and followed by undefined bands of grey-whitish suffusion: cilia reddish-fuscous, tips whitish-yellowish. Hindwings with 6 and 7 stalked; rather dark grey; cilia grey-whitish, with grey basal line.

Invercargill, in January; one specimen (Philpott).

Dipterina crypsidora, n. sp.

♂. 12 mm. Head, palpi, and thorax brown mixed with dark fuscous; palpi under 2, whitish-ochreous towards base; antennal ciliations 2. Abdomen dark fuscous. Forewings elongate-oblong, costa anteriorly moderately arched, apex obtuse, termen slightly rounded, somewhat oblique; dark purplish-fuscous, irregularly strigulated with blackish-fuscous; a narrow blackish-fuscous fascia from middle of costa to $\frac{3}{4}$ of dorsum, slightly curved, somewhat expanded towards costa; the dark strigulation tends to form two or three spots towards apex: cilia dark fuscous, towards tips paler and somewhat mixed with orange-ochreous. Hindwings dark fuscous, more blackish posteriorly; cilia grey mixed with bronzy, with blackish-grey basal shade, tips more whitish. Forewings beneath with a short longitudinal coppery-orange streak beneath upper margin of cell before middle of wing.

Invercargill, in January; one specimen (Philpott).

Eurythecta potamias, n. sp.

♂ ♀. 8-9 mm. Head and thorax brown, sometimes suffused with ferruginous-reddish. Palpi brownish, paler towards base. Abdomen dark grey. Forewings elongate, narrow, costa slightly arched, apex obtuse, termen very obliquely rounded; 3 absent, 7 present; in ♂ with narrow costal fold towards base: varying from ochreous-brown or dark brown tinged with ochreous to bright ferruginous, sometimes sprinkled with black, termen always suffused with ferruginous; in ♂ a more or less indicated streak of ochreous or pale-ochreous suffusion running from base through disc to below middle and thence curved upwards to costa before apex, sometimes distinct and marked at $\frac{2}{3}$ with a whitish spot, sometimes almost obsolete: cilia brown. Hindwings dark grey; cilia grey.

Invercargill, abundant on short vegetation on sandhills in March (Philpott); four specimens. This species differs from all the others of the genus

in the possession of a costal fold in ♂, but is otherwise so nearly allied that it is clearly unnecessary to separate it generically. The genus is separated from all others by the neuraction.

Eurythecta eremana, Meyr.

This species, previously included by me in *Proselena*, is properly referable to *Eurythecta*, having the same neuraction as the preceding. I am much indebted to Mr. Philpott for calling my attention to the actual structure, and thus enabling me to correct my original error of observation. It may, however, be regarded as the most primitive of the five known species of the genus, and the affinity with *Proselena* is real.

PHALONIADÆ.

Heterocrossa thalamota, n. sp.

♂ ♀. 17-18 mm. Head, palpi, and thorax fuscous irrorated with whitish, head paler and more ochreous-tinged; palpi irrorated with blackish on inferior half. Abdomen ochreous-grey-whitish. Forewings elongate, narrow, costa moderately arched, apex obtuse, termen nearly straight, rather strongly oblique; fuscous irrorated with ochreous-whitish; a small pale brownish-ochreous basal patch, suffused with fuscous on costa, limited by an inwardly oblique black line resting externally on a ridge of raised scales; beyond this a dark fuscous blotch from costa reaching half across wing, its posterior angle touching a large tuft of blackish scales below fold surrounded with pale brownish-ochreous suffusion; immediately beyond this a small round ochreous spot strongly edged with blackish in disc at $\frac{1}{3}$, a blackish dot above this, and another at $\frac{2}{5}$ above middle of disc; an irregular light ochreous spot in disc at $\frac{2}{3}$, followed by some blackish scales; an angulated series of blackish dots running from a dark spot on costa beyond $\frac{2}{3}$ to dorsum before tornus: cilia grey irrorated with whitish. Hindwings grey-whitish, slightly ochreous-tinged posteriorly; cilia ochreous-grey-whitish.

Invercargill, in January; two specimens (Philpott). Allied to *iophaea*, but readily distinguished by the black line limiting the pale basal patch, the whitish hindwings, and other differences.

GELECHIADÆ.

Gelechia cheradias, n. sp.

♂ ♀. 12-13 mm. Head and thorax ochreous-grey-whitish. Palpi whitish, second joint tinged with greyish-ochreous beneath, terminal joint shorter than second, with blackish anterior line. Antennæ whitish, sprinkled with dark grey. Abdomen grey mixed with ochreous-whitish, in ♂ suffused with pale ochreous towards base. Forewings lanceolate, acute; light ochreous-brown, suffusedly irrorated with whitish, tending to leave a more or less clear median longitudinal streak of ground-colour; a blackish mark on fold towards base; discal stigmata rather large, black, approximated, plical represented by a dark fuscous or brown cloud, very obliquely before first discal, sometimes extending upwards towards costa; several cloudy blackish or dark fuscous dots on posterior part of costa and termen: cilia whitish, partially tinged with ochreous or fuscous, with an indistinct blackish median line. Hindwings 1, light grey; cilia ochreous-grey-whitish.

Invercargill, common in December at New River (Philpott); three specimens. Quite distinct from any other.

COPHORIDÆ.

Borkhausenia brachyacma, n. sp.

♂. 18 mm. Head whitish-ochreous sprinkled with fuscous. Palpi whitish-ochreous, second joint and a median band of terminal joint irrorated with dark fuscous, terminal joint unusually short, about half second. Antennæ pale ochreous suffusedly ringed with dark fuscous, uniformly pubescent-ciliated. Thorax whitish-ochreous suffused with brownish and irrorated with dark fuscous. Abdomen grey, segments dorsally banded with golden-ferruginous. Forewings elongate, costa gently arched, apex round-pointed, termen very obliquely rounded; ochreous-whitish, closely irrorated with brown; a triangular brownish patch above dorsum towards base, limited posteriorly by a fine inwardly oblique blackish line terminating beneath in a conspicuous raised black dot above $\frac{2}{5}$ of dorsum, preceded by some whitish suffusion; discal stigmata large, round, brown, edged with a few black scales; a small blackish spot on dorsum at $\frac{1}{5}$, whence proceeds a sinuate line of scattered blackish scales near termen, angulated in middle and continued to costa at $\frac{1}{5}$, where it is somewhat dilated and preceded by a spot of whitish suffusion; a bar of brown suffusion from second discal stigma to tornus: cilia ochreous-whitish tinged with brown and irrorated with fuscous, at tornus with a grey bar preceded by whitish suffusion. Hindwings light grey; cilia ochreous-whitish suffused with pale greyish.

Invercargill, in October; one specimen (Philpott). Superficially much like *B. griseata*, but really abundantly distinct when examined in detail; the unusually short terminal joint of palpi and pubescent-ciliated antennæ are notable structural characteristics; the large brown discal stigmata are also a salient point.

Borkhausenia cenchrias, n. sp.

♂. 17 mm. Head whitish-ochreous. Palpi whitish-ochreous, second joint suffusedly irrorated with dark fuscous, terminal joint nearly as long as second, with dark fuscous subapical ring. Antennæ whitish-ochreous spotted with dark fuscous, simply ciliated. Thorax whitish-ochreous mixed with light brownish. Abdomen grey, dorsally banded with ferruginous. Forewings elongate, rather narrow, costa gently arched, apex obtuse, termen rounded, rather strongly oblique; whitish-ochreous suffusedly mixed with ochreous-brown; base of costa suffused with dark fuscous; first discal stigma represented by a short oblique linear black mark, followed by whitish suffusion, second round, whitish, partially edged with black, plical black, rather obliquely beyond first discal; a suffused blackish dot on dorsum towards tornus; some fuscous suffusion towards costa at $\frac{2}{3}$, and towards apex and termen; between these are indications of an angulated suffused whitish-ochreous subterminal line, most distinct towards costa: cilia whitish-ochreous, with a light fuscous sub-basal shade. Hindwings light grey; cilia whitish-grey.

Invercargill, in December; one specimen (Philpott). Also belongs to the *griseata* group, but quite distinct by the character of the stigmata and subterminal line.

Atomotricha isogama, n. sp.

♂ ♀. 23 mm. Head and thorax whitish-ochreous, in ♂ more brownish-tinged. Palpi whitish-ochreous, externally with a few scattered dark-fuscous scales. Antennæ whitish-ochreous, obscurely ringed with dark fuscous.

Abdomen whitish-ochreous, in ♂ more brownish, dorsally suffused with brassy-golden except on margins of segments. Forewings elongate, costa moderately arched, apex obtuse, termen very obliquely rounded; whitish-ochreous, with a few scattered dark-fuscous scales, in ♂ mostly suffused with brownish except on dorsal streak; a broad pale dorsal streak from base to tornus, upper edge prominent near base, where there is a tuft of scales, and about middle of dorsum; some dark-fuscous suffusion extending above this streak from base to $\frac{2}{5}$ of disc, and thence upwards to costa; stigmata round, whitish-ochreous, edged with dark fuscous, plical obliquely beyond first discal; an angulated dark-fuscous line or series of dots from $\frac{1}{5}$ of costa to tornus: cilia ochreous-whitish, in ♂ irrorated with grey, basal third barred with fuscous. Hindwings very pale whitish-ochreous; a cloudy round fuscous discal spot; apex and lower half of termen suffused with fuscous irroration; cilia ochreous-whitish, round apex and on lower half of termen with a suffused fuscous shade.

Wellington; two specimens (Hudson). Differs from both the other described species in having the wings of ♀ fully developed, and formed quite as in ♂; the pale dark-edged stigmata are also characteristic.

Izatha percnitis, n. sp.

♂ ♀. 16–17 mm. Head and thorax rather dark fuscous, somewhat sprinkled with whitish, forehead with conical horny projection. Palpi dark fuscous, somewhat whitish-sprinkled, terminal joint with two whitish bands. Antennæ grey-whitish spotted with dark fuscous. Abdomen dark fuscous, two basal segments dorsally amber-coloured. Forewings rather narrowly elongate-oblong, costa rather arched towards base and apex, apex obtuse, termen almost straight, oblique; dark fuscous, partially tinged with ochreous-brown, slightly whitish-sprinkled; some variable irregularly scattered black dashes and dots in disc, plical stigma represented by a blackish tuft of scales, second discal by a transverse black mark; three very ill-defined transverse fasciæ or lines of whitish suffusion, first at $\frac{1}{4}$, straight, moderately broad, second median, straight, very indistinct, third at $\frac{2}{3}$, narrow, curved, representing subterminal line: cilia fuscous mixed with dark fuscous. Hindwings dark fuscous, somewhat lighter anteriorly; cilia grey, with dark fuscous basal shade.

Wellington; two specimens (Hudson). Distinct by its relatively small size and dark colouring.

PLUTELLIDÆ.

Gracilaria, Hw.

I have recently (Proc. Linn. Soc. N.S.W., 1907, 54–68) recast the limits of this genus and its near allies, from extended material. The New Zealand species are now classified as follows:—

Conopomorpha, Meyr. Middle tibiæ not thickened, posterior tibiæ with bristly hairs.

cyano-spila, Meyr.

Macarostola, Meyr. Middle tibiæ not thickened, scales sometimes expanded at apex only, posterior tibiæ smooth-scaled.

miniella, Feld.

leucocyma, Meyr.

allomacha, Meyr.

æthalota, Meyr.

Gracilaria, Hw. Middle tibiæ thickened with dense scales, more or less rough beneath, posterior tibiæ smooth-scaled.

lincais, Butl.

selenitis, Meyr.

chrysis, Feld.

chalcodelta, Meyr.

Gracilaria selenitis, n. sp.

♀. 12 mm. Head yellow-whitish, sides of crown reddish-ochreous. Palpi yellow-whitish, terminal joint ferruginous-tinged near base. Antennæ white ringed with blackish, basal joint whitish-ferruginous. Thorax ferruginous-ochreous, with a yellow-whitish dorsal stripe. Abdomen rather dark grey, beneath yellow-whitish. Legs whitish, anterior and middle femora and tibiæ mixed with ferruginous-ochreous and sprinkled with black, tips of tarsal joints blackish. Forewings elongate-lanceolate, costa moderately arched posteriorly, apex acute; deep ochreous-yellow, more orange towards dorsum, with a strong purple gloss, strewn throughout except beneath fold with very numerous suffused yellow-whitish dots separated by small dots and strigulæ of dark fuscous scales; three moderate brassy-yellow-whitish spots on dorsum: cilia ochreous-whitish. Hindwings rather dark grey; cilia grey.

Mount Holdsworth, 3,000 ft.; one specimen (Hudson). Very distinct.

Glyphipteryx, Hb.

Finding that *Phryganostola*, which only differed from *Glyphipteryx* by the rough projecting scales or tuft of second joint of palpi, appeared to be an artificial division, which separated nearly allied species, I have suppressed it, including all the species in *Glyphipteryx*.

Glyphipteryx codonias, n. sp.

♀. 14 mm. Head, antennæ, thorax, and abdomen dark fuscous, patagia shining bronze. Palpi black, second joint without tuft, with three white rings, terminal joint with two white stripes. Forewings elongate, rather narrow, costa gently arched, apex round-pointed, termen hardly sinuate, rather strongly oblique; bright golden-bronze; five variably oblique narrow violet-silvery-metallic partly black-edged streaks from costa, first short, slightly before middle, second angulated, reaching half across wing, third short, fourth longer, rather dilated apically, fifth running to termen beneath apex; an erect similar streak from tornus, terminating in a black mark just beyond apex of second costal streak, and a short streak from termen below middle; a small blackish apical spot: cilia grey, basal half bronzy, with a silvery dot on subapical streak, on costa with white bars on streaks. Hindwings blackish-grey; cilia dark grey.

Invercargill, in January; one specimen (Philpott). Resembles *transversella*, but without the pale longitudinal streak, the silvery streaks differently formed, the second angulated, third shorter than fourth (in *transversella* longer than fourth), and otherwise distinct.

TINEIDÆ.

Eschatotypa, Meyr.

Under the names of *derogatella*, Walk., and *melichrysa*, Meyr., treated as synonymous, I have hitherto confused two distinct species, which can now be distinguished under these two names; both are common.

Eschatotypa derogatella, Walk.

Characterized by its dull brownish-ochreous ground-colour, tendency to confusion of the white markings, so that anterior half of wing is sometimes wholly suffused with white, plentiful black strigulation, the ante-median white fascia broadly dilated towards costa, shortly angulated above middle, posterior part of disc confusedly mixed with white and black scales, and presence of distinct black sub-basal line in terminal cilia.

Masterton, Wellington, Christchurch, Invercargill (and, according to Walker, Auckland), from December to March.

Eschatotypa melichrysa, Meyr.

Characterized by clear yellow-ochreous ground-colour, well-defined and separate white black-edged markings, ante-median white fascia very acutely angulated in middle, and absence of black line in terminal cilia.

Whangarei, Auckland, Nelson, Dunedin, Invercargill, in December and January. My original description clearly included both species, but the name (meaning "honey-golden") is a relative definition of this one, and I now limit it in that sense.

Mallobathra scoriota, n. sp.

♂. 13-14 mm. Head, palpi, thorax, and abdomen rather dark fuscous. Antennæ dark fuscous, ciliations 4. Forewings elongate, costa gently arched, apex obtuse, termen very obliquely rounded: 6 present; whitish-fuscous, strewn with cloudy dark-fuscous strigulae; a moderately broad slightly oblique dark-fuscous median fascia; a cloudy dark-fuscous spot on costa at $\frac{3}{4}$; the confluence of the strigulae tends to form suffused spots in disc towards apex, and along termen: cilia whitish-fuscous, with dark-fuscous ante-median shade and indistinct bars on basal third. Hindwings with 6 present; grey; cilia grey.

Wellington (Hudson), Invercargill (Philpott); two specimens.

ART. III.—*On a Method of carrying out the Decimal Currency.*

By H. SKEY.

[Read before the Otago Institute, 11th August, 1908.]

It must be conceded by all that a revision of our tables of money, weights, and measures is absolutely necessary. This is a true social question, to be solved scientifically. Owing to the magnitude of the undertaking, it would be impossible to deal with more than one of those questions at a time, so that the general public might become conversant with it first before undertaking the others. There is little doubt that the commencement should be with the currency, and I think, if it can be shown that the introduction of only one or two coins is all that is necessary to give us the decimal system of counting, the following method is well worthy of consideration.

We have now eleven different coins in our currency; but the decimal currency can be effected by the use of only seven, four of which are